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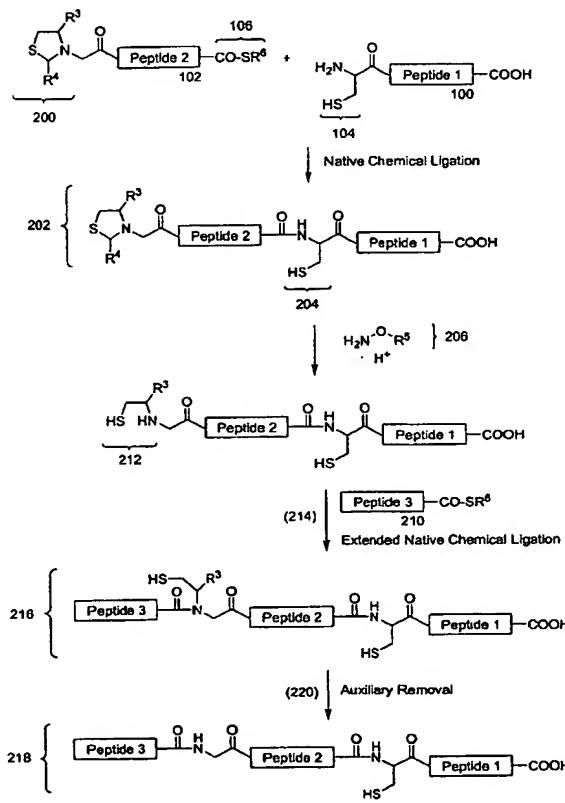
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[Continued on next page]

(54) Title: CARBOXY PROTECTION STRATEGIES FOR ACIDIC C-TERMINAL AMINO ACIDS IN CHEMICAL LIGATION
OF OLIGOPEPTIDES



(57) Abstract: The present invention provides methods of assembling oligopeptides or polypeptides in a native chemical ligation reaction that eliminates the formation of unwanted side products resulting from the presence of an unprotecte acidic C-terminal oligopeptide thioester. An important aspect of the present invention is providing side chain protected acidic C-terminal oligopeptide thioesters. The present invention is useful in methods for chemical synthesis of oligopeptides, polypeptides and proteins and improves the efficiency of native chemical ligation reactions, particularly where aspartyl or glutamyl peptide fragments are used to assemble an oligopeptide, polypeptide or protein product.

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	T M HACKENG ET AL.: "Protein synthesis by native chemical ligation: expanded scope by using straightforward methodology" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol. 96, 1999, pages 10068-10073, XP002940700 NATIONAL ACADEMY OF SCIENCE. WASHINGTON., US ISSN: 0027-8424 the whole document ----- -/-	1-11

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Y S LEE ET AL.: "A convergent liquid-phase synthesis of salmon calcitonin" JOURNAL OF PEPTIDE RESEARCH., vol. 54, 1999, pages 328-335, XP002274977 MUNKSGAARD, COPENHAGEN., DK ISSN: 0367-8377 the whole document ---	1-11
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A	A B CLIPPINGDALE ET AL.: "Peptide thioester preparation by FMOC solid phase peptide synthesis for use in native chemical ligation" JOURNAL OF PEPTIDE SCIENCE., vol. 6, no. 5, pages 225-234, XP009015362 JOHN WILEY AND SONS LTD., GB ISSN: 1075-2617 the whole document ---	1-11
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	M VILLAIN ET AL.: "Native chemical ligation with aspartic and glutamic acids as C-terminal residues: scope and limitations." EUROPEAN JOURNAL OF ORGANIC CHEMISTRY., no. 17, 2003, pages 3267-3272, XP002274981 WILEY-VCH, WEINHEIM., DE ISSN: 1434-193X the whole document -----	1-11
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